

1. (Amended) An isolated polynucleotide comprising a member selected from the group consisting of:

- (a) a polynucleotide having at least a 70% identity to a polynucleotide encoding an enzyme comprising the amino acid sequence[s] set forth in SEQ ID NO: 4;
- (b) a polynucleotide [which] that is complementary to the polynucleotide of (a); and
- (c) a polynucleotide comprising at least 15 bases of the polynucleotide of (a) or (b).

2. (Reiterated) The polynucleotide of Claim 1 wherein the polynucleotide is DNA.

3. (Reiterated) The polynucleotide of Claim 1 wherein the polynucleotide is RNA.

4. (Reiterated) The polynucleotide of Claim 2 which encodes an enzyme comprising amino acids 1 to 364 of SEQ ID NO:4.

5. (Reiterated) An isolated polynucleotide comprising a member selected from the group consisting of:

- (a) a polynucleotide having at least a 70% identity to a polynucleotide encoding an enzyme encoded by the DNA contained in ATCC Deposit No _____, wherein said enzyme is AEDII12RA- α -gal-18GC;
- (b) a polynucleotide complementary to the polynucleotide of (a); and
- (c) a polynucleotide comprising at least 15 bases of the polynucleotide of (a) and (b).

6. (Reiterated) A vector comprising the DNA of Claim 2.

7. (Amended) A host cell comprising the vector of Claim [13] 6.

8. (Amended) A process for producing a polypeptide comprising[:] expressing from the host cell of Claim [14] 7 a polypeptide encoded by said DNA.

9. (Amended) A process for producing a cell comprising[:] transforming or transfecting the cell with the vector of Claim [13] 6 such that the cell expresses the polypeptide encoded by the DNA contained in the vector.

Please add the following new claims:

Sub B
A-13. (New) The polynucleotide of claim 1 wherein the polynucleotide has at least 70% identity to a polynucleotide encoding an enzyme comprising the amino acid sequence set forth in SEQ ID NO:4 and encodes a protein having enzymatic activity. A

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A
A-14. (New) The polynucleotide of claim 13 wherein the polynucleotide has at least 90% identity under stringent conditions to a polynucleotide encoding an enzyme comprising the amino acid sequence set forth in SEQ ID NO:4.

A-15. (New) The polynucleotide of claim 6 wherein the polynucleotide has at least 70% identity to a polynucleotide encoding AEDII2RA- α -gal-18GC and encodes a protein having enzymatic activity. A

A-16. (New) The polynucleotide of claim 15 wherein the polynucleotide has at least 90% identity under stringent conditions to a polynucleotide encoding AEDII2RA- α -gal-18G. A

A-17 (New) The polynucleotide of claim 2 wherein the DNA is cDNA, genomic DAN or synthetic DNA. A

Sub B4
A-18. (New) The polynucleotide of claim 2 wherein the DNA is single stranded or double stranded. A

A-19. (New) The polynucleotide of claim 14 wherein the single stranded DNA is a coding sequence or a non-coding sequence. A